

Message

From: Greene, Nikia [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=32A08A414A4F40199B557C0819EB7D0B-GREENE, NIKIA]
Sent: 3/11/2020 4:02:17 PM
To: Partridge, Charles [Partridge.Charles@epa.gov]; Tony Hartshorn [Ex. 6 Personal Privacy (PP)]
CC: Lynn Woodbury [woodburyl@cdmsmith.com]
Subject: RE: Following up on my phone call earlier...
Attachments: Exponent_review-16Jan2020.pdf; MRreviewofMeconium_email.pdf; MTR Q2 2019 Monitoring Report - Complete Final.pdf; MTR Q3 2019 Monitoring Report - Complete Final.pdf; MTR Q1 2019 Monitoring Report - Complete Final.pdf

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From: Partridge, Charles <Partridge.Charles@epa.gov>
Sent: Tuesday, March 10, 2020 4:26 PM
To: Tony Hartshorn [Ex. 6 Personal Privacy (PP)]
Cc: Greene, Nikia <Greene.Nikia@epa.gov>; Lynn Woodbury <woodburyl@cdmsmith.com>
Subject: Re: Following up on my phone call earlier...

Nikia,

Could you also share the Montana Resources external memo?

Cp

Charlie Partridge, PhD
Toxicologist
USEPA
Denver, Colorado

On Mar 10, 2020, at 10:26 AM, Tony Hartshorn [Ex. 6 Personal Privacy (PP)] wrote:

Sorry all; Charlie just set me straight on the footnote I'd missed related to the Turker et al. #s being typos (without a published erratum or correction, of course!). Thanks Charlie.

On Tue, Mar 10, 2020 at 10:01 AM Tony Hartshorn [Ex. 6 Personal Privacy (PP)] wrote:

Fantastic Nikia--thank you. There's a lot to unpack here.

I guess what we try to do as teachers is hope our students understand messaging like

"Trust a numbers-based argument, especially if it's been peer-reviewed."

But verify those numbers and interpretations because even though the scientific approach is awesome (e.g., COVID-19!), it's practiced by humans, which makes it susceptible to bias and error."

Before I dive too far down this meconium rabbit-hole, is your team sure on your translation of meconium Zn concentrations in 291 surviving infants (Table 2) from Turker et al. 2013 (Ped Int'l; you first report their Zn number on slide 13 you shared)? I took the median surviving infant birthweight of 2070 g, converted it to 2.07 kg (as it appears your team did as well), and then multiplied that by their median Zn level for that cohort of 92 ng/g/kg (Table 2) to obtain 190 **ng/g**.

But your slide 13 reports 190 **ug/g** and so I think is 1000X too high. Am I off?

Same issue with copper, by the way. I took Turker et al.'s Table 2 copper concentration of 48 ng/g/kg * 2.07kg to get 100 **ng/g**, but your materials show 100 **ug/g**.

Here's the slide I lectured with in mid-February from Turker et al. 2013.
<Turker et al 2013 Table 1 Table 2 meconium metal muddle context.jpg>

Please don't mind my typo where I mis-represented the cohort size. It should be 291. I don't think these are very big deals in the grand scheme of things, but obviously they totally (in my naive view) change your log Y scale series of graphs.

Such an adventure. To be continued.

On Tue, Mar 10, 2020 at 7:19 AM Greene, Nikia <Greene.Nikia@epa.gov> wrote:

Hi Tony,

Nice to meet you and It is great to have professor like you that encourages students to not take science for granted and the word of any independent researcher (i.e. do your research before forming an opinion/conclusion). Thank you!

I have copied Charlie (EPA Risk Assessor) and Lynn (CDM Risk Assessor) in case they want to way in.

Attached is a presentation and summary figures we gave at the Butte Silver Bow Board of Health meeting on Feb. 5 2020. Also, we are currently drafting a letter to the Journal proposing a retraction and will be interested in your student results from this project. Please keep us posted and reach out if you need any additional support.

Thanks,

Nikia Greene

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From: Tony Hartshorn Ex. 6 Personal Privacy (PP)
Sent: Monday, March 09, 2020 6:29 PM
To: Greene, Nikia <Greene.Nikia@epa.gov>
Subject: Following up on my phone call earlier...

Hi Dr. Greene:

As I mentioned in my voicemail earlier, I was chatting with Roger Hoogerheide recently after he guest-lectured for my Soil remediation class. After I mentioned what I've come to call the "Meconium metal muddle" (the McDermott et al. publication in the fall), he chuckled and said, "You should just reach out to Nikia."

So here I am. As I also mentioned in my voicemail, I've asked my students to prepare fake memos to an EPA remedial manager, supporting or opposing the request that the journal retract the McDermott et al. article. Of course their memo had to assemble evidence in support of or opposing the notion. Here is the table they are to assemble in teams.

<image002.jpg>

In a lecture several weeks back now, I outlined what I was able to see with meconium studies from Turkey (Turker et al. 2013), Taiwan (Jiang et al. 2014), and Canada (MIREC; Arbuckle et al. 2016). I also previewed at least 2 additional articles (Lall et al. 2005, Haram-Mourabet et al. 1998) that were locked behind paywalls, even with MSU's subscriptions.

I'm guessing you & your office have prepared some type of literature review that contextualizes some of the results provided in the McDermott et al. paper. Would you be willing to share that with me as I evaluate these student essays the week after our Spring Break (week of March 23)?

(If not, no worries.)

I'll look forward to meeting you in person at some point!

Tony

--

Tony Hartshorn

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Ex. 6 Personal Privacy (PP) | @SoildocTony | #soilculture #notabot #diggingsquirrel

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